

REMARKS

A. Request for Reconsideration

Applicant has carefully considered the matters raised by the Examiner in the outstanding Office Action but remains of the position that patentable subject matter is present. Applicant respectfully requests reconsideration of the Examiner's position based on the Declaration of Mr. Narito Goto, the amendments to the claims and the following remarks.

B. The Invention

The present invention is directed to a photothermographic material having improved image density, improved silver color tone and improved storage stability after light irradiation. In one of the novel aspects of the invention, the photothermographic material contains a cyan leuco dye, a yellow coloring leuco dye of Formula (YA) and a reducing agent that comprises a compound of Formula (1).

C. Claim Status

Claims 26-28-37 are presented for further prosecution. Claims 1-25 have been withdrawn from consideration.

Claim 26 has been amended to delete the parenthesis that appear in the claim and to identify that the compound of Formula (YA) as a yellow coloring leuco dye as explained on page 98, lines 13-18 of the application. Even though the Office Action had been made final, entry of this amendment is requested since no new matter has been added and the claim has not been changed in scope.

D. The Office Action

Claims 26 and 28-37 had been rejected as being unpatentable over Biavasco (US 5,330,864) in view of Fukui (US 2002/0102502) and Cerquone (US 4,021,240). Biavasco had been cited to teach a photothermographic material having a silver salt, a silver halide, a binder, a cyan leuco dye and a reducing agent. Fukui had been cited to teach a photothermographic material using a combination of a yellow coloring leuco dye of Formula (YA) and a reducing agent of Formula (1). Cerquone had been cited to teach that reducing agents react with silver salt oxidizing agents to produce dyes. Based on Cerquone, the Examiner had taken the position that it would be obvious to add the two reducing agents of Fukui to the material of Biavasco.

In the Response dated September 26, 2005, the August 26, 2005 Declaration of Mr. Narito Goto had been presented to demonstrate that unexpected results are obtained when the cyan

leuco dye of Biavasco was added to the material of Fukui. In the current Office Action, the Examiner had criticized the Declaration for three reasons. First, the Examiner had stated that Biavasco is the closest prior art and Biavasco was not tested. Second, the Declaration was criticized for not presenting results such as Dmin, Dmax, speed and contrast as shown in Table 1 of col. 20 of Biavasco. Third, the Declaration was criticized since the tested materials contained a mercapto compound which is not recited in claim 26. Applicant will address each of these issues in turn.

1. The enclosed Declaration tests the material of Biavasco

Applicant has performed additional tests which compare the material of Biavasco to the material of the present invention.

Mr. Goto prepared Comparative sample 3-1 of the Declaration in accordance with Example 1 in col. 18 of Biavasco. Comparative sample 3-1 is not representative of claim 26 since Comparative sample 3-1 does not include a yellow coloring leuco dye of Formula (YA) or a reducing agent of Formula (1).

Inventive sample 3-1 was prepared similar to Comparative sample 3-1, except that Mr. Goto replaced the reducing agent (tribenzylamine) of Comparative sample 3-1 with a combination of 1.02 grams of reducing agent (1-1) on page 59 of the application (equivalent to reducing agent (1-4) on page 3 of Fukui) and with

0.065 grams of yellow coloring leuco dye (YA-1) on page 103 of the application (equivalent to yellow coloring leuco dye (2-3) on page 6 of Fukui). Inventive sample 3-1 is therefore representative of claim 26 since Inventive sample 3-1 includes a yellow coloring leuco dye of Formula (YA) and a reducing agent of Formula (1).

Mr. Goto evaluated Inventive sample 3-1 and Comparative sample 3-1 for image density, silver color tone and storage stability after light irradiation. The evaluation results are shown in Table 3 of the Declaration.

Table 3 shows that Inventive sample 3-1 including a yellow coloring leuco dye of Formula (YA) and a reducing agent of Formula (1) is superior to Comparative sample 3-1 in terms of image density, silver color tone and storage stability after light irradiation. This superiority is significant, since Inventive sample 3-1 had a maximum density of 4.0, while Comparative sample 3-1 had a lower maximum density of 2.3. In addition, Inventive sample 3-1 had preferable tone which was similar to the standard sample (4.0 rating), while Comparative sample 3-1 had undesirable tone which was different than the standard sample (1.0 rating). Still further, Inventive sample 3-1 had a slight change in tone after irradiation and storage (4.0 rating), while Comparative sample 3-1 had noticeable

changes in tone with increased photographic fog and density unevenness (1.0 rating).

In addition to the above, Mr. Goto reported a comparison between Fukui (Comparative samples 1-1 and 1-3) which was prepared in the August 26, 2005 Declaration and the present invention (Inventive sample 3-1). Comparative sample 1-1 and Comparative sample 1-3 contained reducing agent (1-1) of Fukui (equivalent to reducing agent (2-1) on page 61 of the present invention) and yellow coloring leuco dye (2-3) of Fukui (equivalent to yellow coloring leuco dye (YA-1) on page 103 of the present invention). The test results for Comparative sample 101 and Comparative sample 1-3 are shown in Table 4 of the enclosed Declaration.

Mr. Goto stated based on Tables 3 and 4 of the Declaration that the present invention is surprising and unexpected because the results of the present invention are far superior to the results for Biavasco (Comparative sample 3-1) and Fukui (Comparative sample 1-1 and Comparative sample 1-3), even if the results were combined. For example, the image storage stability for the present invention (Inventive sample 3-1) is 4.0, while the image storage stability for Biavasco (Comparative sample 3-1) is 1.0 and the image storage stability for Fukui (Comparative sample 1-1 and Comparative sample 3-1) is 2.5. Mr. Goto

therefore declared that the results in Tables 3 and 4 are surprising and unexpected.

2. It is not necessary to perform tests which evaluate the properties shown in Table 1 of Biavasco

The Examiner had criticized the August 2005 Declaration for not evaluating the materials to determine Dmin, Dmax, speed and contrast as shown in Table 1 of Biavasco.

Applicant respectfully submits that it is not necessary to provide test data for each and every property that can possibly be tested. Instead, it is only required to test one property of the materials to show that the materials are different. In the August 2005 Declaration as well as in the enclosed Declaration, Mr. Goto chose to test the materials for image density, silver color tone and storage stability after light irradiation. The evaluation results for these three properties show that the present invention is superior to the materials of the references.

It is therefore respectfully submitted that Mr. Goto sufficiently evaluated the claimed material and the materials of the references to show that the claimed material is superior.

3. Comparative sample 3-1 and Inventive sample 3-1 in the enclosed Declaration do not contain a mercapto compound

The Examiner had criticized the August 2005 Declaration since the tested materials contained a mercapto compound which is not required by claim 26.

Comparative sample 3-1 and Inventive sample 3-1 of the enclosed Declaration do not contain a mercapto compound. It is therefore respectfully submitted that Inventive sample 3-1 of the enclosed Declaration is within the scope of claim 26.

4. It would not be obvious to add the compound and reducing agent of Fukui to Biavasco based on Cerquone

The Examiner had taken the position that it would be obvious to add the reducing agents of Fukui to the material of Biavasco, because Cerquone teaches that reducing agents react with silver salt oxidizing agents to produce dyes.

Although Cerquone generally teaches that reducing agents produce dyes, Cerquone does not suggest to select the specific reducing agent of the claimed Formula (1). Thus, there is no motivation for one of skill in the art to select the specific reducing agent of Formula (1) from all known reducing agents based on the teachings of Cerquone.

In addition, Cerquone simply teaches that reducing agents react with silver salt oxidizing agents to produce dyes. Cerquone provides no motivation to add a yellow coloring leuco dye to the material of Biavasco. Moreover, Cerquone provides no

motivation to select the specific yellow coloring leuco dye of Formula (YA) from all known yellow coloring leuco dyes. It is therefore respectfully submitted that it would not be obvious to select a yellow coloring leuco dye of Formula (1) based on the teachings of Cerquone.

Applicant therefore respectfully submits that the present invention is not obvious over the combined teaches of Biavasco, Fukui and Cerquone, since these references provide no motivation to add the specific reducing agent of Formula (1) and the specific compound of Formula (YA) to the material of Biavasco.

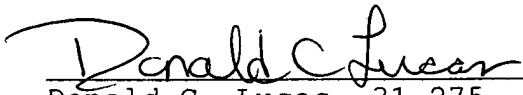
E. Conclusion

In view of the foregoing and the enclosed, it is respectfully submitted that the application is in condition for allowance and such action is respectfully requested. Should any extensions of time or fees be necessary in order to maintain this Application in pending condition, appropriate requests are

hereby made and authorization is given to debit Account # 02-
2275.

Respectfully submitted,

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Encl: Executed Declaration of Mr. Narito Goto
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